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| APPLICATION NO.            | FILING DATE           | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------|-----------------------|-----------------------|---------------------|------------------|
| 10/597,381                 | 07/22/2006            | Yoshiyuki Hojo        | 40404.44/ko         | 1240             |
| 54068<br>ROHM CO., I       | 7590 08/28/2008<br>TD | 3                     | EXAM                | INER             |
| C/O KEATING                | G & BENNETT, LLP      | PATEL, DHARTI HARIDAS |                     |                  |
| 1800 Alexando<br>SUITE 200 | er Bell Drive         |                       | ART UNIT            | PAPER NUMBER     |
| Reston, VA 20191           |                       |                       | 2836                |                  |
|                            |                       |                       | NOTIFICATION DATE   | DELIVERY MODE    |
|                            |                       |                       | 08/28/2008          | EL ECTRONIC      |

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JKEATING@KBIPLAW.COM uspto@kbiplaw.com

# Office Action Summary

| Application No. | Applicant(s)    | Applicant(s) |  |  |
|-----------------|-----------------|--------------|--|--|
| 10/597,381      | HOJO, YOSHIYUKI |              |  |  |
| Examiner        | Art Unit        |              |  |  |
| DHARTI H. PATEL | 2836            |              |  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

| eamed | patent term adjustment. | See 37 | CFR | 1.704(0). |
|-------|-------------------------|--------|-----|-----------|
|       |                         |        |     |           |

| Period ic   | ог керіу   |   |
|---|--|---|
| WHIC<br>- Exter<br>after<br>- If NO<br>- Failu<br>Any | IORTENED STATUTORY PERIOD FOR REPLY IS SET<br>CHEVER IS LONGER, FROM THE MAILING DATE OF T<br>missions of time may be available under the provisions of 37 CFR 1.136(a). In no.<br>D, prind for reply is specified above. The missions shallow period will apply and<br>ure to reply within the set or estanded period for reply will by shaller, cause the are<br>reply received by the Office later than three months after the mailing date of this<br>red partnet time displanter. See 37 CFR 1.70(b). | THIS COMMUNICATION.  vent, however, may a reply be timely filed  will expire SIX (6) MONTHS from the mailing date of this communication,  pplication to become ABANDONED (35 U.S.C. § 133). |
| Status  |  |   |
| 2a)□  | Responsive to communication(s) filed on 22 July 2006. This action is FINAL. 2b) $\boxtimes$ This action is Since this application is in condition for allowance exceptions of a coordance with the practice under Ex parts G   | ot for formal matters, prosecution as to the merits is  |
| Dispositi   | tion of Claims   |   |
| 5)□<br>6)⊠<br>7)⊠                                     | Claim(s) <u>5-10</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from claim(s) is/are allowed.  Claim(s) <u>5.6.8 and 9</u> is/are rejected.  Claim(s) <u>7.10</u> is/are objected to.  Claim(s) are subject to restriction and/or election   |   |
| Applicati   | tion Papers  |   |
| 10)🛛  | The specification is objected to by the Examiner. The drawing(s) filed on 22 July 2006 is/are: a) ☑ accept Applicant may not request that any objection to the drawing(s). Replacement drawing sheet(s) including the correction is requ. The oath or declaration is objected to by the Examiner. It   | be held in abeyance. See 37 CFR 1.85(a). ired if the drawing(s) is objected to. See 37 CFR 1.121(d).  |
| Priority ι  | under 35 U.S.C. § 119  |   |
| a)  | Acknowledgment is made of a claim for foreign priority u  All b  | nen received.  Hen received in Application No  Hen received in Application No  Hents have been received in this National Stage  ule 17.2(a)).   |
| Attachmen   | nt(s)  |   |
| 1) Notic  | ce of References Cited (PTO-892)   | 4) Interview Summary (PTO-413)  |

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/Sb/08)

Paper No(s)/Mail Date 07/22/2006.

5) Notice of Informal Patent Application. 6) Other:

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#### DETAILED ACTION

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5-6 and 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitsuda. Patent No. 5.973.551.

With respect to claim 5, Mitsuda discloses an overcurrent detection circuit [Fig. 2] which detects an overcurrent when the overcurrent flows to an output transistor [Fig. 2; transistor Q1] including an input terminal [Fig. 2; drain of transistor Q1] to which a supply voltage [Fig. 2; Vcc] is input, a control terminal to which a control voltage is input [Fig. 2; gate terminal of transistor Q1, which is controlled by control circuit 1], and an output terminal from which an output current is output [Fig. 2; output terminal of Q1], the overcurrent detection circuit comprising: a monitor transistor [Fig. 2; transistor Q4] including a control terminal and an output terminal which are connected to the control terminal and the output terminal respectively of the output transistor [Fig. 2; gate terminals of transistors Q1 and Q4, and drain terminals of transistors Q1 and Q4 are connected]; an output current detection transistor [Fig. 2; transistor Q3] including an input terminal to which a supply voltage is input [Fig. 2; Vcc], a control terminal to which a detection bias voltage is input, and an output terminal which is connected to an input terminal of the monitor transistor [Fig. 2; source terminal of transistor Q3 is connected to

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the drain terminal of transistor Q4]; a constant current source [Fig. 2; current source 3] that generates a reference current; a reference transistor [Fig. 2; transistor Q2] including an input terminal to which a supply voltage is input, a control terminal to which the detection bias voltage is input, and an output terminal from which the reference current flows to the constant current source; and a comparison circuit [Fig. 2; comparator 2] that detects an overcurrent when the overcurrent flows to the output transistor [Fig. 2; Q1] by comparing the voltage of the output terminal of the output current detection transistor [Fig. 2; Q3] and the voltage of the output terminal of the reference transistor [Fig. 2; Q2], and outputs an overcurrent detection signal [Fig. 2; signal coming out from control circuit 1 and going to the gate terminal of the output transistor Q1; col. 4 lines 30 – col. 5 lines 621.

With respect to claim 6, Mitsuda discloses that the output transistor [Fig. 2; Q1], the monitor transistor [Fig. 2; Q4], the output current detection transistor [Fig. 2; Q3], and the reference transistor [Fig. 2; Q2] are P-type MOS transistors [col. 7 lines 27-31].

With respect to claims 8-9, Mitsuda discloses the output transistor [Fig. 2; Q1] is provided between a supply voltage [Fig. 2; Vcc] and an output terminal that outputs a predetermined DC voltage, and the regulator further includes a control circuit [Fig. 2; control circuit 1] that controls the output transistor to maintain the predetermined DC voltage by inputting the voltage of the output terminal as feedback and that turns off the output transistor when the overcurrent detection signal of the overcurrent detection circuit [Fig. 2; output signal from the comparator 2] is input to the control circuit [col. 5 lines 41-63].

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### Allowable Subject Matter

Claims 7 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for indicating allowance of claim 7: The prior art does not disclose that the comparison circuit comprises a diodeconnected first comparison transistor that is interposed between the constant current source and the reference transistor; a second constant current source that generates a current that is a predetermined multiple of the reference current generated by the constant current source; and a second comparison transistor that is interposed between the second constant current source and the output current detection transistor, a control terminal of the second comparison transistor being connected to a control terminal of the first comparison transistor. This feature in combination with the rest of the claim limitations is not anticipated or rendered obvious by the prior art of record.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DHARTI H. PATEL whose telephone number is (571)272-8659. The examiner can normally be reached on 7:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2800, Ext. 36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J Sherry/ Supervisory Patent Examiner, Art Unit 2836

/Dharti H Patel/ Examiner, Art Unit 2836 08/25/2008